THERMAL SECURITY MATRIX

FLIR Security offers the most technically-advanced thermal perimeter protection for critical infrastructure. We feature a full range of cameras that provide unparalleled intrusion detection, day and night, at such critical locations as airports, power grids and utilities.

Thermal cameras see far along fence lines by detecting the heat of intruders at great distances in all lighting conditions. When utilizing onboard or external analytics, FLIR cameras also intelligently classify human and vehicles, resulting in fewer false alarms.

Because our cameras are open platform, they easily integrate into FLIR Latitude VMS, as well as major third party video management systems, access control systems, and sensor technologies.

FLIR is the world leader in developing thermal technology for the security industry. Our cameras are available in a wide range of configurations–including bullet, dome, and PTZ options–with multiple lens options. They are renowned for their reliability, performance and solid ownership experience.

FLIR®

FLIR ELARA™

ONVIF® | S

	FC-Series R	FB-Series O	FB-Series ID	FC-Series O	FC-Series ID
	Fixed IP Thermal Camera with Radiometrics	Fixed IP Thermal Camera	Fixed IP Thermal Camera with built-in analytics	Fixed IP Thermal Camera	Fixed IP Thermal Camera with built-in analytics
Resolution	VGA (640x480),	QVGA (320x240)	QVGA (320x240)	VGA (640x480), QVGA (320x240)	VGA (640x480), QVGA (320x240)
Thermal Sensor	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer
Thermal FOV	VGA 2 models 32° & 45° (13 & 19mm)	5 models - 9°, 12°, 24°, 49° & 93° (3.7, 6.8, 12.8, 18 & 24mm)	5 models - 9°, 12°, 24°, 49° & 93° (3.7, 6.8, 12.8, 18 & 24mm)	4° to 69° QVGA, 9 models (9 to 75mm) 8°to 90° VGA, 8 models (7.5 to 75mm)	4° to 69° QVGA, 9 models (9 to 75mm) 8°to 90° VGA, 8 models (7.5 to 75mm)
Wide Dynamic Range Thermal	Yes	Yes	Yes	Yes	Yes
Video Outputs	IP & Analog	IP & Analog	IP & Analog	IP & Analog	IP & Analog
Video	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264 & MJPEG	Dual stream H.264 & MJPEG	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264, MPEG-4 & MJPEG
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S
Ingress Rating /Min. Oper. Temp.	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start	-40°C to 50°C (-40°F to 122°F) cold start	-40°C to 50°C (-40°F to 122°F) cold start	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start
Anti-Ice/De-Ice	Yes	No	No	Yes	Yes
Power Inputs	PoE, PoE+, 18-32 VAC, 18-44 VDC	12 VDC, 24VAC, PoE	12 VDC, 24VAC, PoE	PoE, PoE+, 14-32 VAC, 11-44 VDC	PoE, PoE+, 14-32 VAC, 11-44 VDC
High Performance Surge Protection	Yes	Yes	Yes	Yes	Yes
Warranty Period	3 Years on Cameras, 10 Years on Thermal Sensor				

FLIR TRITON™

ONVIF® S

	PT-Series HD	PT-602CZ HD	A310PT	D-Series	F-Series ID
Resolution	Thermal VGA (640x480) Visible – Full HD 1080p	Thermal VGA (640x480) Visible – Full HD 1080p	Thermal QVGA (320x240) Visible – D1	Thermal VGA (640x480) and QVGA (320x240) Visible – D1	Fixed IP Thermal VGA (640x480) with built-in analytics
Thermal Sensor	Uncooled Sun-safe VOx Microbolometer	Cooled Sun-safe FPA Detector Technology	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer
Thermal FOV	Continuous optical zoom model 6° to 24° (26 and 105mm) 5 fix lens models 8° to 44° (13 to 75mm)	Continuous optical zoom model 2° to 28° (19 to 275mm)	25° Standard (7°/15°/45°/90° options available)	QVGA 4 models 13° to 48° (9-35mm) VGA 3 models 18° to 45° (13-35mm)	VGA 5 models 8° to 44° (13 to 75mm)
Wide Dynamic Range Thermal	Yes	Yes	No	Yes	Yes
Pan Angle/Speed Tilt Angle/Speed	Continuous 360°, 0.1° to 60°/sec +90° to -90°, 0.1° to 30°/sec	Continuous 360°; 0.1° to 60°/sec +90° to -90°, 0.1° to 30°/sec	Continuous 360°, 0.1° to 60°/sec +90° to -90°, 0.1° to 30°/sec	Continuous 360°, 0.5° to 60°/sec +22° to -90°, 0.5° to 60°/sec	Fixed
Video Outputs	IP & Analog	IP & Analog	IP & Analog	IP & Analog	IP & Analog
IP Video	Dual stream H.264 & MJPEG for each sensor	Dual stream H.264 & MJPEG for each sensor	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264 & MJPEG
Visible Camera	CMOS, 30X optical zoom with auto-focus and 12X digital zoom FOV 63.7° to 2.3°	CMOS, 30X optical zoom with auto-focus and 12X digital zoom FOV 63.7° to 2.3°	HAD CCD, 36X optical zoom, 12X digital FOV 57.8° to 1.7°	HAD CCD, 36X optical zoom, 12X digital FOV 57.8° to 1.7°	No
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S
Ingress Rating /Min. Oper. Temp.	-40°C to 70°C (-40°F to 158°F) cold start	-32°C to 55°C (-25°F to 131°F) cold start	-25°C to 50°C (-13°F to 122°F)	-25°C to 70°C (-13°F to 158°F) continuous operation	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start
Anti-Ice/De-Ice	Yes	Yes	Yes	Yes	Yes
Power Inputs	24 VAC, 24 VDC	24 VAC, 24 VDC	24V AC, 24 VDC	24 VAC, 24 VDC	24 VAC, 24 VDC
High Performance Surge Protection	Yes	Yes	Yes	Yes	Yes
Warranty Period	2 Years on Cameras, 10 Years on Thermal Sensor				

FLIR SAROS™

ONVIF® | S

	1080p IR PTZ
Resolution	1080p 1920x1080 @ 30/25 fps
Image Sensor	1/2.8" CMOS
WDR support	sWDR
Focal Length/ FOV (H)	30X Continuos Zoom Lens 4.3 to 129mm 2.6°– 68.7° HFOV
Built-in IR	Yes – Up to 200m (656 ft.)
ONVIF Conformance	Profile S/G
Edge Storage Support	microSDXC up to 128GB (Class 10)
Audio Support	Yes/Full Duplex
Ingress Rating / Operating Temperature	IK10 Upper / IK8 Lower IP66 Overall -45° to 50° C (-49° to 122° F)
Power Inputs	PoE++ 802.3bt 60W, 12VDC, 24VAC
Warranty Period	2 Years

	DH-390 Dome
Thermal Camera	
Array Format	320x120 native, 960x360 VividIR
Pixel Pitch	12 μm
Max Frame Rate Thermal	10FPS
Optical Characteristics	2 X Lepton 3.5 HFOV 57° each Min. Stitched HFOV 90°, f/1.1 Thermal sensitivity <50mK
Visible Light Camera	
Sensor Type	1900 x 1080, 2.1MP, 1/2.8"
Lens Type	3mm / F1.6, P-Iris with auto-focus
Max Frame Rate	30 fps
White Balance	Automatic
Aspect Ratio	16:9
Wide Dynamic Range (WDR)	Yes
Day Night Mode	Automatic with 940nm NIR LEDs for very low light scenes. White light LEDs automatic on event for color detail.

FLIR ioi™

	TRK-101	TRK-101 P PTZ
	Video Encoder with built-in analytics with both IP and analog input	Video Encoder with built-in analytics with both IP and analog input Supports PTZ with detection on presets, PTZ tracking and hand-off from fixed camera
Supported via IP	FLIR – F-Series, FC-Series S, FC-Series R, FC-Series ID, TCX mini-bullet 3rd Party – Axis, Sony, Bosch, Hikvision	Quasar 30X PTZ, PT-Series, A310pt, PT-Series HD, PT-602CZ HD
IP Input	H.264 main profile, via RTSP	H.264 main profile, via RTSP
Channels	1	1
IP Video Streaming	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG
Physical Connector	1x BNC 75Ω	1x BNC 75Ω
Frame Rate	MPEG-4 25/30 fps for all resolutions H.264 D1 half frame-rate, VGA 18 fps	MPEG-4 25/30 fps for all resolutions H.264 D1 half frame-rate, VGA 18 fps
Bit Rate	CBR (128Kbps-4Mbps), VBR	CBR (128Kbps-4Mbps), VBR
Network Video Streaming	RTP/RTSP	RTP/RTSP
Alarms/Commands	TCP/IP, HTTP	TCP/IP, HTTP
Operating Temperature	0° to 60°C (32° to 140°F)	0° to 60°C (32° to 140°F)
Alarms	In - 1, Out - 1	In – 1, Out – 1
Warranty Period	2 Years	

Further information on thermal imaging cameras and their application can be obtained from:

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